

Flash floods

#1 Severe Weather-Related Killer in the United States!

How do flash floods occur?

Several factors contribute to flash flooding. The two key elements are rainfall intensity and duration. Intensity is the rate of rainfall, and duration is how long the rain lasts. Topography, soil conditions, and ground cover also play an important role.

Flash floods occur within a few minutes or hours of excessive rainfall, a dam or levee failure, or a sudden release of water held by an ice jam. Flash floods can roll boulders, tear out trees, destroy buildings and bridges, and scour out new channels. Rapidly rising water can reach heights of 30 feet or more. Furthermore, flash flood-producing rains can also trigger catastrophic mud slides. You will not always have a warning that these deadly, sudden floods are coming. Most flood deaths are due to **FLASH FLOODS**.

Most flash flooding is caused by slow-moving thunderstorms, thunderstorms repeatedly moving over the same area, or heavy rains from hurricanes and tropical storms.

STAY INFORMED ABOUT THE STORM

by listening to NOAA Weather Radio, commercial radio, and television for the latest flash flood/flood **WATCHES, WARNINGS, and ADVISORIES**.

NOAA WEATHER RADIO IS THE BEST MEANS TO RECEIVE WARNINGS FROM THE NATIONAL WEATHER SERVICE. The National Weather Service continuously broadcasts updated weather warnings and forecasts that can be received by NOAA Weather Radios sold in many stores. Average range is 40 miles, depending on topography. Your National Weather Service recommends purchasing a radio that has both a battery backup and a tone-alert feature which automatically alerts you when a watch or warning is issued.

How can a foot or two of water cost you your life?

yy Water weighs 62.4 lbs. per cubic foot and typically flows downstream at 6 to 12 miles an hour.

yy When a vehicle stalls in the water, the water's momentum is transferred to the car. For each foot the water rises, 500 lbs. of lateral force are applied to the car.

yy But the biggest factor is buoyancy. For each foot the water rises up the side of the car, the car displaces 1,500 lbs. of water. In effect, the car weighs 1,500 lbs. less for each foot the water rises.

yy *Two feet of water will carry away most automobiles.*

Flash Flood Safety

Flash floods can strike any time and any place with little or no warning. Observe these flash flood safety rules. They could save your life.

- yy Keep alert for signs of heavy rain (thunder and lightning), both where you are and upstream. Watch for rising water levels.
- yy Know where high ground is and get there quickly if you see or hear rapidly rising water.
- yy Be especially cautious at night. It's harder to recognize the danger then.
- yy Do not attempt to cross flowing water which may be more than knee deep. If you have doubts, don't cross.
- yy Don't try to drive through flooded areas.
- yy If your vehicle stalls, abandon it and seek higher ground immediately.
- yy During threatening weather listen to commercial radio or TV, or NOAA Weather Radio for Watch and Warning Bulletins.